Serial No. 10/537,467

Page -2-

In The Claims:

Please replace the previously presented claim set with the following replacement claim set:

1-21. (Canceled)

22. (Previously Presented) A particulate suspension comprising a liquid phase having suspended therein a solid substantially insoluble in said liquid phase, wherein the suspension is stabilised by the reaction product of:

(i) a polymeric stabiliser having a hydrophilic moiety and a hydrophobic moiety and comprising a plurality of vinylic monomers, not being exclusively of vinylic esters or of their hydrolysed products, at least some of which contain functional groups capable of undergoing cross-linking nucleophilic or condensation reactions, and

(ii) one or more substances contained in the liquid phase capable of undergoing a cross-linking reaction with said functional groups;

wherein the ratio by weight of (a) the polymeric stabiliser prior to cross-linking to (b) the suspended solid is less than 1 part of polymeric stabiliser per 5 parts of suspended solid by weight.

- 23. (Previously Presented) A particulate suspension according to claim 22, wherein the suspended solid comprises an agrochemical solid.
- 24. (Previously Presented) A particulate suspension according to claim 23, wherein the agrochemical solid has a particle size of from 1 to 10 microns.
- 25. (Previously Presented) A particulate suspension according to claim 22, wherein said polymeric stabiliser is represented by the general formula (I):



Serial No. 10/537,467

Page -3-

wherein:

one * represents a residue of an initiator group and the other * represents a residue of a terminator group;

R1, R and R2 are each independently H or methyl;

X is a hydrophilic moiety;

L is a moiety containing a cross-linking group;

Y is a hydrophobic moiety;

e ranges from 0 to 0.8;

f ranges from 0.05 to 0.4;

g ranges from 0.10 to 0.90; and

e + f + g equals 1;

provided that when e is 0, at least one * represents the residue of a hydrophilic initiator.

- 26. (Previously Presented) A particulate suspension according to claim 25, wherein e ranges from 0.005 to 0.35, and f ranges from 0.01 to 0.4.
- 27. (Previously Presented) A particulate suspension according to claim 25, wherein one * represents the residue of a hydrophilic initiator and said residue has the formula

II

wherein Z is a hydrophilic group selected from C_1 to C_4 alkoxypolyethylene glycol, phenyloxy polyethylene glycol, poly(acrylamide), poly(vinyl pyrrolidone) or poly(methyl vinyl ether), and -W- is -O- or -NA- wherein A is hydrogen or a C_1 to C_4 alkyl group.

- 28. (Previously Presented) A particulate suspension according to claim 25, wherein:
- -X is or carries a hydrophilic moiety X' selected from -SO₃; polyethylene glycol optionally end-capped with C1-C4 alkyl; -COOH or a salt thereof; carboxybetaine; sulfobetaine;

Serial No. 10/537,467

Page -4-

and a quaternary ammonium salt $-N^+R^3{}_3C^*$ wherein each R^3 is independently H or $C_1\text{-}C_4$ alkyl or $-\text{CH}_3\text{-}\text{CH}_3\text{-}\text{CH}_3\text{-}$

–L is or carries a cross-linking group L' selected from –OH; –SH; –NHA where A is hydrogen or C_1 - C_4 alkyl; and -COOH or a salt thereof; and

-Y is or carries a hydrophobic moiety Y* selected from -CO-O- $(-Si(CH_3)_2O$ - $)_n$ -H wherein n is from 3 to 20; -CO-O-polypropylene glycol; -CO-O-A wherein A is a C_1 - C_{12} alkyl group, cycloaklyl group, alkylcycloalkyl group, aralkyl group or alkylaryl group; and -CONHB wherein B is a C_3 - C_{12} alkyl group.

29. (Previously Presented) A particulate suspension according to claim 28, wherein -X is selected from the groups:

wherein n indicates an average degree of polymerisation of a polyethylene glycol chain and is from 5 to 100.

30. (Previously Presented) A particulate suspension according to claim 28, wherein -L is selected from the groups:

wherein n indicates a degree of polymerisation of a propylene glycol and is from 5 to 50.

31. (Previously Presented) A particulate suspension according to claim 28, wherein -Y is selected from the groups:

wherein n indicates a degree of polymerisation of a propylene glycol and is from 5 to 50.

AMENDMENT AND RESPONSE Serial No. 10/537,467

Page -6-

- 32. (Currently Amended) A particulate suspension according to claim 22, wherein said polymeric stabiliser comprises:
- (i) a hydrophilic moiety derived from one or more vinylic monomers selected from 2-(N,N-dimethyl-N-(2-methacryloxyethyl) ammonium)ethanoic acid; 2-(trimethylammonium)ethyl methacrylate salt; 3-(N,N-dimethyl-N-(2-methacryloxyethyl) ammonium)propyl-sulphonic acid; the sodium salt of methacrylic acid; mono-2-(methacryloxyethyl) succinate; mono-methoxy poly(ethylene glycol) mono-methacrylate; styrene-4-sulfonic acid; 4-vinylbenzyl trimethyl ammonium chloride; 2-N-morpholinoethyl; 2-methacryloxyethylphosphonate methacrylate; 2-acrylamido-2-methylpropane sulphonic acid; mono-methoxy-PEO-(meth)acrylate; acrylamide; vinyl pyrrolidone; 2-sulphoethyl methacrylate; 2-acrylamido-2-methylpropane sulphonic acid; quaternary salts of dimethylaminoethyl methacrylate (DMAEMA) and of dimethylaminoethyl acrylate or DMAEMA at acid pHs; 2-(trimethylammonium)ethyl methacrylate iodide; 2-(N,N-dimethyl-N-(2-methacryloxyethyl) ammonium)ethanoic acid; and styrene-4-sulfonic acid;
- (ii) a mojety that possesses reactive or cross-linking ability with respect to said one or more substances contained in said aqueous phase of said suspension and capable of undergoing a cross-linking reaction with said functional group and being derived from one or more vinylic monomers selected from 2-aminoethyl methacrylate; 2-(tert-butylamino) ethyl methacrylate; 2-hydroxyethyl methacrylate; 2.3-dihydroxypropyl methacrylate; the sodium salt of methacrylic acid; mono-2-(methacryloyloxy)ethyl succinate; poly(propylene glycol) mono-methacrylate; 2aminoethyl methacrylate hydrochloride; N-(3-aminopropyl)methacrylamide hydrochloride; 4aminostyrene: 2-(iso-propylamino)ethylstyrene: 4-N-(vinylbenzyl)aminobutyric acid; 3-(Nstyrylmethyl-2-aminoethylamino)-propyltrimethyoxysilane hydrochloride; N-(3-methacryloxy-2hydroxypropyl)-3-aminopropyltriethoxysilane; 2-methoxy-4-vinylphenol; 4-vinylbenzyl alcohol; 4-vinylphenol; 2,6-dihydroxymethyl-4-methoxystyrene; 3,5-dimethoxy-4-hydroxystyrene; 2hydroxy-3-methacryloxypropyl trimethyl ammonium chloride; 3-chloro-2-hydroxypropyl methacrylate; 3-hydroxypropyl methacrylate; 2-hydroxy-3-phenoxypropyl methacrylate; diethylene glycol mono-methacrylate; 2-methacryloxyethyl glucoside; sorbitol methacrylate; caprolactone 2-methacryloxyethyl ester; 4-hydroxybutyl methacrylate; 2-hydroxypropyl methacrylate: acrylic acid: beta-carboxyethylacrylic acid: 4-vinylbenzoic acid: 4-(/3methacryloxy)propoxy)benzoic acid; mono-(2-(methacryloxy)ethyl)phthalate itaconic acid;

Serial No. 10/537,467

Page -7-

iminated derivatives of polymerized acrylic acid, beta-carboxyethylacrylic acid, 4-vinylbenzoic acid, 4-((3-methacryloxy)propoxy)benzoic acid, mono-(2-(methacryloxy)ethyl)phthalate or

itaconic acid; and glycidyl (meth)acrylate reacted with alkylamines; and

(iii) a hydrophobic moiety derived from one or more vinylic monomers selected from

methyl methacrylate; poly(dimethylsiloxane); mono-methacrylate; and poly(propylene glycol)

mono-methacrylate.

33. (Canceled)

34. (Previously Presented) A particulate suspension according to claim 25, wherein e ranges

from 0.1 to 0.5.

35. (Previously Presented) A particulate suspension according to claim 27, wherein (i) said

polymeric stabilizer is a block copolymer comprising a hydrophilic block and a hydrophobic

block; (ii) said hydrophilic block comprising at least one of (1) said residue having formula (II)

and (2) a hydrophilic unit (-CH $_2$ CR 1 X-); and (iii) said hydrophobic block comprising randomly

or sequentially copolymerised units (-CH $_2\text{CR}_2\text{Y}$ -) and cross-linking units (-CH $_2\text{CH}_2\text{CRL}$ -).

36. (Previously Presented) A particulate suspension according to claim 35, wherein $\mathbf{f} + \mathbf{g}$ ranges

from 0.2 to 1.0, and a ratio of f:g is from 1:2 to 1:10.

37. (Previously Presented) A particulate suspension according to claim 35, wherein:

(a) when said functional group on said polymeric stabiliser is hydroxyl or thiol, said

one or more substances comprises an isocyanate, an ester, an epoxide, a divinylsulphone, or a

glycerol triglycidyl ether;

(b) when said functional group on said polymeric stabiliser is -NHA wherein A is

hydrogen or a C₁ to C4 alkyl group, said one or more substances comprises an isocyanate, an acetoacetoxy group, an aldehyde, an acrylate, a vinylsulphone, an epoxide, glycerol triglycidyl

acetoacetoxy group, an aldehyde, an acrylate, a vinylsulphone, an epoxide, glycerol triglycidyl ether: glycerol propoxylate triglycidyl ether: trimethylolpropane triacrylate: trimethylolpropane

Serial No. 10/537,467

Page -8-

propoxylate triacrylate, glutaric dialdehyde, 2-(acetoacetoxy) ethyl acrylate, or 1,4-butandiol diacetoacetate; and

(c) when said functional group on said polymeric stabiliser is an acid reactive group, said one or more substances comprises an isocyanate, an aziridine or a carbodiimide.

38. (Previously Presented) A particulate suspension according to claim 37, wherein said functional group on said polymeric stabiliser is hydroxyl or thiol or -NHA, and said one or more substances comprises an isocyanate wherein the isocyanate is selected from m-phenylene disocyanate; 1-chloro-2,4-phenylene diisocyanate; 4,4'-methylenebis(phenyl isocyanate); 3,3'dimethyl-4,4'-biphenylene diisocyanate 4,4'-methylenebis(2-methylphenyl isocyanate); 3,3'dimethoxy-4,4'biphenylene diisocyanate; 2,4-tolylene diisocyanate; 2,6-tolylenediisocyanate; tetramethyl-4,4'-biphenylene diisocyanate; isophorone diisocyanate; hexane-1,6-diisocyanate; tetramethylene xylene diisocyanate; α,4-tolylene diisocyanate; tolylene 2,5-diisocyanate; 2,4,6trimethyl-1.3-phenylene diisocyanate: poly(ethylene adipate) tolylene 2.4-diisocyanate terminated; poly(isophorone diisocyanate); poly(propylene glycol) tolylene 2.4-diisocyanate terminated; poly(1,4-butanediol) tolylene diisocyanate terminated; 1,8-diisocyanatooctane; poly(hexamethylene diisocyanate); poly(tolylene 2,4-diisocyanate); poly(tetrafluoroethylene oxide-co-difluoromethylene oxide) α.ω-diisocyanate; 1,4-diisocyanatobutane; 1,3-phenylene disocyanate; 1,4-phenylene diisocyanate; trans-1,4-cyclohexylene diisocyanate; m-xylylene diisocyanate: α.α-dimethyl-α.4-phenylethyl diisocyanate: 4-bromo-6-methyl-1.3-phenylene diisocyanate: 4-chloro-6-methyl-1,3-phenylene diisocyanate: poly(1,4-butanediol) isophorone disocvanate terminated; 3.3'-dimethyl-4.4'-biphenylene disocvanate; and 1.3-bis(1-isocvanato-1-methylethyl)benzene.

39. (Previously Presented) A particulate suspension according to claim 22, wherein the ratio by weight of (a) the polymeric stabiliser prior to cross-linking to (b) the suspended solid is from 1 part of polymeric stabiliser to 200 parts of suspended solid to 1 part of polymeric stabiliser per 10 parts of suspended solid.

Serial No. 10/537,467

Page -9-

40. (Previously Presented) A particulate suspension comprising:

- (a) a continuous aqueous liquid phase;
- (b) a reaction product of:
- (i) a polymeric stabiliser having a hydrophilic moiety and a hydrophobic moiety and comprising a plurality of vinylic monomers, not being exclusively of vinylic esters or of their hydrolysed products, at least some of which contain functional groups capable of undergoing cross-linking nucleophilic or condensation reactions, and
- (ii) one or more substances contained in the continuous aqueous liquid phase capable of undergoing a cross-linking reaction with said functional groups; and
- (c) an agrochemical solid that is substantially insoluble in said continuous aqueous liquid phase and suspended within said continuous aqueous liquid phase via said reaction product;

wherein the ratio by weight of (a) the polymeric stabiliser prior to cross-linking to (b) the suspended agrochemical solid is less than 1 part of polymeric stabiliser per 5 parts of suspended agrochemical solid by weight.

41. (Previously Presented) A particulate suspension according to claim 40, wherein said polymeric stabiliser is represented by the general formula (I):

wherein:

one * represents a residue of an initiator group and the other * represents a residue of a terminator group;

R1, R and R2 are each independently H or methyl;

X is a hydrophilic moiety;

L is a moiety containing a cross-linking group;

Y is a hydrophobic moiety;

e ranges from 0 to 0.8;

f ranges from 0.05 to 0.4;

Serial No. 10/537,467

Page -10-

g ranges from 0.10 to 0.90; and

e + f + g equals 1;

provided that when e is 0, at least one * represents the residue of a hydrophilic initiator; and said one or more substances comprises an isocyanate.

42. (Previously Presented) A particulate suspension according to claim 41, wherein -X

comprises
$$CO_{2^{-}}$$
; $-L$ comprises NH_{2} ; $-Y$ comprises $O_{2^{-}}$

and said one or more substances comprises a tolylene diisocyanate.

43. (Currently Amended) A particulate suspension according to claim 4 22, wherein said liquid phase comprises a single continuous aqueous liquid phase.